

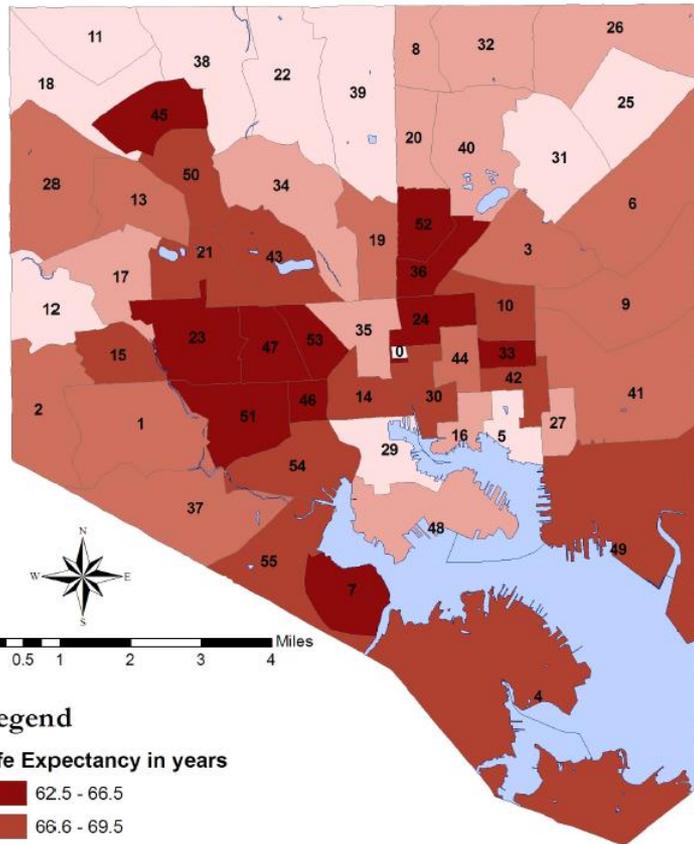


Health Care Integration at Hopkins: Challenges & Progress in J-CHiP

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East Baltimore Community

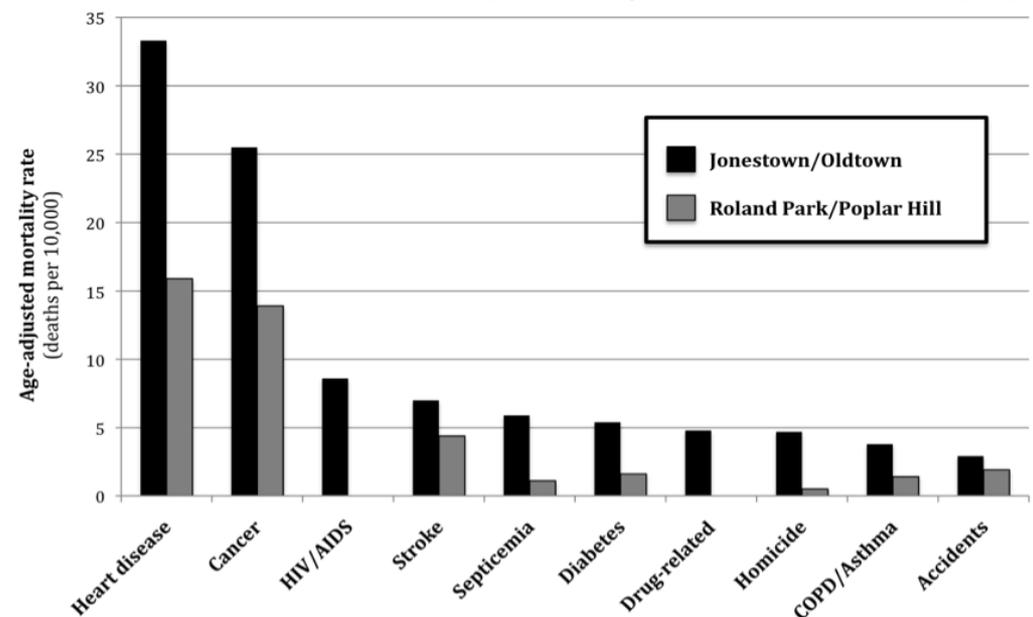
Life Expectancy in Years by Community Statistical Area, Baltimore City, 2002-2006



Baltimore City Health Department analysis using data from the Maryland Department of Health and Mental Hygiene's Vital Statistics Administration and the 55 Community Statistical Areas created by the Baltimore City Planning Department and the Family League of Baltimore City. Life Expectancy calculated using 5 year age groups and 75 years as the cut-off.

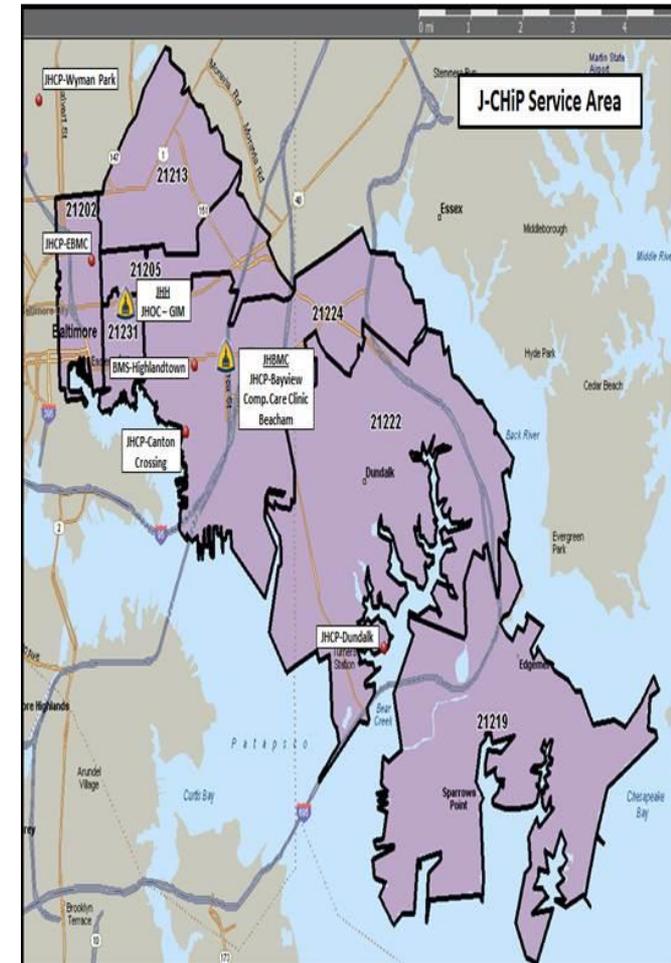
- 20 year difference in life expectancy
- Major portion of mortality difference due to treatable conditions

Figure 1. Top ten causes of death in Baltimore City comparing mortality rates between Jonestown/Oldtown and Roland Park/Poplar Hill neighborhoods for 2002-2006 [3, 4].



Community Health Partnership

- Health Care Innovation Award launched in 2012 and built on existing programs
- **Transforms across continuum:**
clinics, SNFs, hospitals, home, community and EDs
- Acute care/SNF largely completed June 2015, extension through June 2016 for community component
- **East Baltimore Community is “Core”**



The Community Health Partnership



1..2..3

1 Program focused on care coordination across continuum.

2 Target Populations:

- a. By year 3, **nearly all 40,000 adult patients** discharged annually from JHH and JHBMC and **thousands of ED visits.**
- b. Underserved, **high risk** East Baltimore population → **≈ 1000 PPMCO and 2000 Medicare patients.**

3 Primary Intervention Components:

- a. **Acute/Post-Acute/ED:** As above.
- b. **Ambulatory/Community Care:** JHM clinic sites and 1 BMS site within or near the 7 zip codes surrounding JHH/JHBMC.
- c. **Skilled Nursing Facilities (SNFs):** Includes all JHH/JHBMC discharges to 5 neighboring SNFs as well as JHBMC Care Center.

J-CHiP Aims

Aims

- JHM will improve care coordination for M/M acute care patients and 3,000 M/M high risk community residents by the end of year 3.
- JHM will recruit, train, and deploy new workers (along with many additional in-kind hires).
- JHM will reduce direct costs per inpatient and will reduce total cost of care for M/M high risk community residents.

Primary Drivers

Acute care delivery redesign

Seamless transitions of care

Deployment of community care teams

J-CHiP Vital Statistics

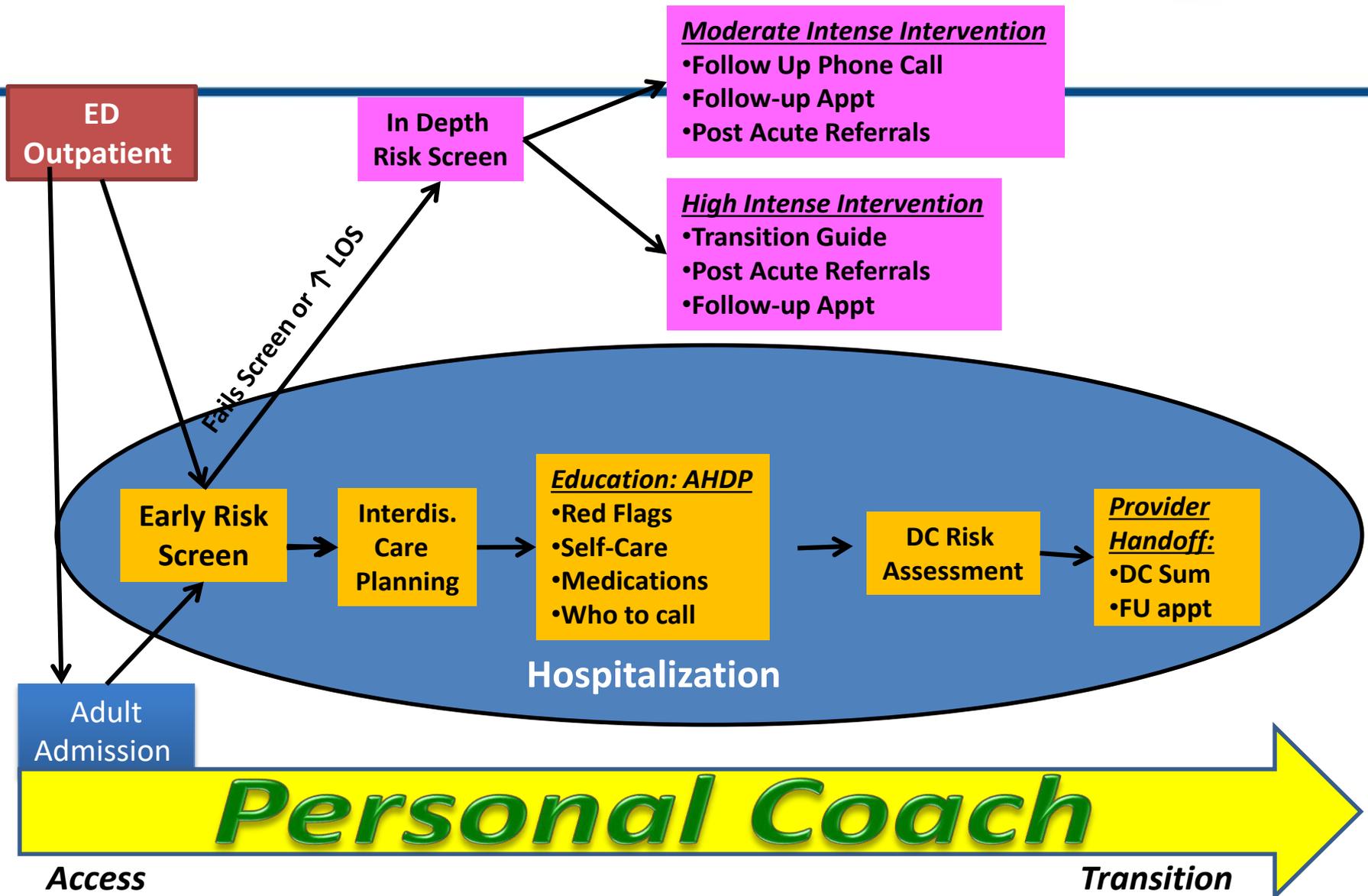
- **Total Program Participants: 80,257**
 - (including 3,000+ high risk community residents, 40% residing in the 7-zipcodes surrounding JHH and JHBMC)
- **Total Training Hours: 2,568 staff (not unique) and 19,200+ hours**
- **Total New Workers Hired and Trained: 106**
- **Program Participants from 7-zip code area: 25,116 (31%)**
- **Number (%) Medicare/Duals/Medicaid:**
 - 23,047 (29%); 4,843 (6%); 16,399 (20%)
- **Inpatient Units: 35 (14 JHBMC; 21 JHH)**
- **Ambulatory Clinics: 7**
- **SNF Sites: 5**

Table 1

Baseline characteristics of community population enrolled in a multi-disciplinary health care collaboration to improve readmissions and health

Characteristic	Priority Partners 1000 High-Risk Patients % (n)	Medicare 2000 High-Risk Patients % (n)
Age: Mean (Range)	49 (19–64)	74 (23–100)
Female:	73% (728)	62% (1248)
Medicaid Qualification Reason		
Disability (SSI)	83% (830)	N/A
Temporary Aid to Needy Families (TANF)	17% (170)	N/A
6+ Chronic Conditions	36% (361)	85% (1703)
Congestive Heart Failure	32% (319)	31% (620)
Hyperlipidemia	52% (521)	65% (1305)
Hypertension	84% (841)	92% (1846)
Peripheral Circulatory Disease	13% (127)	11% (213)
Diabetes	49% (491)	46% (925)
Kidney Disease	28% (283)	55% (1103)
Transplant	2% (20)	4% (72)
Neurological Condition	20% (195)	64% (1287)
Chronic Obstructive Pulmonary Disease	29% (291)	32% (636)
HIV/AIDS	9% (90)	3% (67)
Anxiety, Neuroses	15% (151)	18% (352)
Depression	31% (314)	33% (654)
Bipolar Disease	15% (151)	8% (167)
Schizophrenia or Affective Psychosis	8% (75)	8% (157)
Substance Abuse	45% (450)	N/A
At least 1 hospital admission in the last year	47% (469)	57% (1137)

Care Coordination



J-CHiP-B, aka “The B Team”

B = Behavioral Health (or B = Best)

Behavioral health

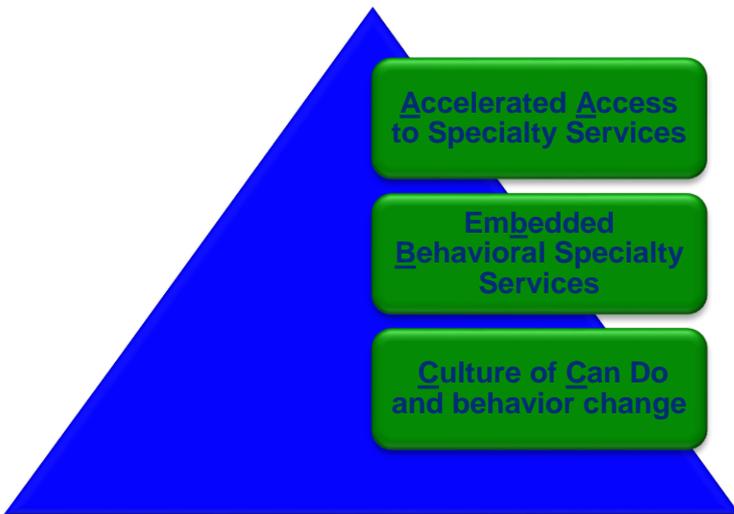
- Mental illness
- Addiction
- Health behavior

The Need

- 70% smokers
- 57% BMI > 30
- 56% current psych
- 45% SA
- 29% EtOH

The Impact

- Shorter life span
- Worse life quality
- 25% higher costs
- Delay 20% of discharges



Accelerated Access
to Specialty Services

Embedded
Behavioral Specialty
Services

Culture of Can Do
and behavior change

The Team

- Community workers
- Care managers
- Health Behavior Spec.
- Physicians
- Psychologists
- Psychiatrists

Integration

- Uniform training
- Single HBS team
- In- and Out-reach
- Early detection
- Community engagement

Summary of Outcomes – NORC, external evaluator

OUTCOMES, Hospital Arm^{\$\$}

- COST** 
 - Reduction in 90-day total cost of care (-\$1,115 per beneficiary-episode, Medicare)
 - Reduction in 90-day total cost of care (-\$4,987 per beneficiary-episode, Medicaid)
- UTILIZATION** 
 - Increase in 90-day hospitalizations and 30-day readmissions and (11 and 14 per 1,000 beneficiary-episodes per quarter, respectively, Medicare)
 - Decrease in 90-day ED visits (-134 per 1,000 beneficiary-episodes per quarter, Medicaid); increases in 90-day hospitalizations and 30-day readmissions (53 and 26 per 1,000 beneficiary-episodes per quarter, respectively, Medicaid)
- QUALITY** 
 - Decrease in 7-day and 30-day practitioner follow-up visits post-discharge (-41 and -29 per 1,000 beneficiary-episodes per quarter, respectively, Medicare)
 - Decrease in 30-day and 7-day practitioner follow-up visits post-discharge (-70 and -184 per 1,000 beneficiary-episodes per quarter, respectively, Medicaid)

OUTCOMES, Community Arm^{\$\$}

- COST** 
 - Reduction in total quarterly cost of care (-\$495 per beneficiary, Medicare)
 - Reduction in total quarterly cost of care (-\$1,756 per beneficiary, Medicaid)
- UTILIZATION** 
 - Decrease in hospitalizations and ED visits (-17 and -16 per 1,000 Medicare beneficiaries per quarter, respectively)
 - Decrease in hospitalizations and ED visits (-31 and -48 per 1,000 Medicaid beneficiaries per quarter, respectively)
- QUALITY** 
 - Decrease in avoidable hospitalizations (-7 per 1,000 Medicaid beneficiaries per quarter)
- HEALTH** 
 - 82% of respondents report that they spoke with clinic staff about how to take care of themselves
 - Most respondents report that they trust their community health worker (CHW) and would recommend their provider to family and friends

Accomplishments

- CMS Triple Aim achieved
 - Better care for individuals
 - Improvements in HCAHPS scores, high patient satisfaction among community participants
 - Better health for populations
 - Acute: reductions in 30-day readmissions for Medicare and Medicaid (internal evaluation)
 - Community: reductions in ED visits for Medicare and Medicaid (internal and external evaluations)
 - Reductions in cost
- J-CHiP original project goals achieved
 - Improve care coordination across the continuum, including behavioral health integration across settings
 - Recruit and hire innovative workforce
 - Realize cost savings

Accomplishments (cont'd)

- Meaningful achievements in each of the six JHM Strategic Priorities
- Fostered strong relationship with community-based organizations
 - Sisters Together and Reaching (STAR)
 - Men and Families Center (MFC)



Challenges

- Patient and provider engagement
- Sustaining and expanding community partnerships in East Baltimore
- Imperfect data collection
- Optimizing Epic for care coordination
- Evolving state and federal policy landscape

Sustainability: What programs have been influenced by J-CHiP?

- Johns Hopkins' ACO, Johns Hopkins Medicine Alliance for Patients
- Baltimore City Regional Partnership
- JHH and JHBMC HSCRC Hospital Transformation Strategic Goals
- Advantage MD (Medicare Advantage)
- JHM SNF Collaborative
- Others

Incredible Talent and Teamwork



(including but not limited to...)

Project Directors

- Paul Rothman
- Patty Brown
- Scott Berkowitz

Acute Care

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- Dan Brotman
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- Regina Richardson
- Tracy Novak
- Lindsay Hebert

Behavior

- Kostas Lyketsos
- Anita Everett
- Laura Torres
- Melissa Reuland
- Eric Strain
- Michael Fingerhood

Over 100 newly hired staff...

- Case Managers
- Transition Guides
- Community Health Workers
- Transition Pharmacy Extenders
- Neighborhood Navigators
- ...and many more!

Research/Evaluation

- Eric Bass
- Albert Wu
- Shannon Murphy
- Doug Hough
- Kevin Frick
- Larry Appel
- Felicia Hill-Briggs

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